

番红染色液(0.5%，革兰氏)

货号：G1067

规格：10mL/100mL/500mL

保存：2-8℃保存，有效期1年。

产品介绍：

革兰氏染色法是细菌学中广泛使用的一种鉴别染色法，通过结晶紫初染和碘液媒染后，在细胞壁内形成了不溶于水的结晶紫与碘的复合物，革兰氏阳性菌细胞壁较厚，肽聚糖网层次较多且交联致密，脱色液脱色时，肽聚糖脱水使孔径缩小，故保留结晶紫-碘复合物在细胞膜上，呈紫色。革兰氏阴性菌细胞壁薄、外膜层类脂含量高、肽聚糖层薄且交联度差，脱色后类脂外膜迅速溶解，缝隙加大，结晶紫与碘复合物溶出，因此脱色后再经番红复染，呈红色。

番红染色液(0.5%，革兰氏)是可用于革兰氏染色法脱色后复染，使革兰氏阴性菌着红色。亦可根据实验要求用于其他物质或结构染色。

操作步骤：（仅供参考）

1. 革兰氏染色：

- ① 菌涂片后使用甲醇固定或热固定。
- ② 滴加结晶紫染色液后，染色1分钟，水洗。
- ③ 滴加碘液后染色1分钟，水洗。
- ④ 滴加脱色液，摇动玻片，根据涂片厚度，脱色约20-60秒，水洗，吸去多余水分。
- ⑤ 滴加番红染色液后，染色1分钟，水洗。
- ⑥ 滤纸吸干多余水分或在空气中晾干后，100倍油镜镜检。

2. 其他染色：

- ① 遵照实验要求进行染色，推荐染色0.5-3min，染色结果耐水洗。

染色结果：（革兰氏）

革兰氏阴性菌	红色
革兰氏阳性菌	紫色

注意事项：

- 1、为了您的安全和健康，请穿实验服并戴一次性手套操作。

Safranin O Stain Solution, 0.5%, For Gram Stain

Cat: G1067

Size: 10mL/100mL/500mL

Storage: 2-8°C, valid for 1 year.

Introduction

The Gram Stain is a different staining technique most widely applied in microbiology. Gram staining is based on the ability of bacteria cell wall to retaining the crystal violet dye during solvent treatment. The cell walls for Gram-positive microorganisms have a higher peptidoglycan and lower lipid content than gramnegative bacteria. Bacteria cell walls are stained by the crystal violet. Iodine is subsequently added as a mordant to form the crystal violet-iodine complex so that the dye cannot be removed easily. However, subsequent treatment with a decolorizer dissolves the lipid layer from the gram-negative cells. As a result, the diffusion of the violet-iodine complex is blocked, and the bacteria remain stained. The length of the decolorization is critical in differentiating the gram-positive bacteria from the gram-negative bacteria. Finally, a counterstain of safranin is applied to the smear to give decolorized gram-negative bacteria a pink color.

Safranin O Stain Solution, 0.5%, For Gram Stain can be used for re staining after decolorization by gram-negative staining to make Gram-negative bacteria red. It can also be used for dyeing other substances or structures according to experimental requirements.

Protocol(for reference only)

1. For Gram Stain:

- 1) After smearing, fix the bacteria with methanol or heat.
- 2) Flood with Gram's Crystal Violet Solution for 1 min. Wash with tap water.
- 3) Flood the smear with Gram's Iodine Solution. Allow it to remain for 1 min.
- 4) Pour off the Iodine Solution and gently wash with tap water. Shake off the excess water from the surface.
- 5) Decolorize with Gram's Decolorizing Solution for 20-60 s until the blue dye no longer flows from the smear. Further delay will cause excess decolorization in the gram-positive cells, and the purpose of staining will be defeated. Wash with tap water.
- 6) Counterstain with Gram's Safranin Solution for 1 min. Wash with tap water.
- 7) Allow the slide to air dry or blot dry between sheets of clean bibulous paper and view under oil immersion lens.

2. For Other Stain:

Dye according to the experimental requirements. It is recommended to dye for 0.5-3min, and the dyeing result is resistant to light washing.

Result (Gram Stain)

Gram-positive Organisms	Bluish Purple
Gram-negative Organisms	Pinkish Red

Note

1. For your safety and health, please wear experimental clothes and disposable gloves.